

Title (en)
Coin discriminating apparatus

Title (de)
Vorrichtung zum Unterscheiden von Münzen

Title (fr)
Dispositif discriminateur de pièces de monnaie

Publication
EP 1054360 B1 20020911 (EN)

Application
EP 00109729 A 20000508

Priority
JP 13923399 A 19990519

Abstract (en)
[origin: EP1054360A1] A coin discriminating apparatus includes light emitting elements for emitting light toward one surface of a coin being transported, a line sensor for photoelectrically detecting light reflected by the one surface of the coin and producing image pattern data of the one surface of the coin, a reference data memory for storing reference data of coins of each denomination, a preliminary denomination discriminator for calculating a diameter of the coin based on the image pattern data of the one surface of the coin produced by the line sensor, comparing the thus calculated diameter of the coin with reference diameter data of coins of each denomination and preliminarily determining the denomination of the coin, and a denomination discriminator for reading reference pattern data of coins of the denomination determined by the preliminary denomination discriminator from the reference data memory comparing the thus read reference pattern data with image pattern data of the one surface of the coin and finally determining the denomination of the coin, at least 70 % of the light emitting elements being disposed on straight lines connecting the center of a reference coin and points where a periphery of the reference coin crosses the line sensor and at positions equidistant from the center of the reference coin by the same distance L. According to the present invention, it is possible to provide a compact coin discriminating apparatus which can discriminate coins with high accuracy and can be manufactured at low cost. <IMAGE>

IPC 1-7
G07D 5/00

IPC 8 full level
G06K 9/00 (2006.01); **G06T 1/00** (2006.01); **G07D 5/00** (2006.01); **G07D 5/02** (2006.01); **G07D 5/10** (2006.01)

CPC (source: EP KR US)
G06F 18/00 (2023.01 - US); **G07D 5/005** (2013.01 - EP KR US); **G07D 5/02** (2013.01 - EP KR US); **G07D 5/08** (2013.01 - KR); **G07D 5/10** (2013.01 - EP US)

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 1054360 A1 20001122; EP 1054360 B1 20020911; CN 1123849 C 20031008; CN 1274903 A 20001129; DE 60000426 D1 20021017; DE 60000426 T2 20030109; HK 1031015 A1 20010525; JP 2000331210 A 20001130; JP 3609285 B2 20050112; KR 100338488 B1 20020530; KR 20000077198 A 20001226; TW 432340 B 20010501; US 6412620 B1 20020702

DOCDB simple family (application)
EP 00109729 A 20000508; CN 00108904 A 20000519; DE 60000426 T 20000508; HK 01101749 A 20010312; JP 13923399 A 19990519; KR 20000024630 A 20000509; TW 89108205 A 20000429; US 56331600 A 20000502